Resource Management Systems

INTRODUCTION

Conservation planning is a natural resource problem solving and management process. The process integrates economic, social, and ecological considerations to meet private and public needs. This approach, which emphasizes desired future conditions, helps improve natural resource management, minimize conflict, and address problems and opportunities. The nine step planning process used by NRCS is discussed in detail in the National Planning Procedures Handbook (NPPH).

The first step in the planning process is an initial determination of the client's problems, opportunities, and concerns related to natural resources and human considerations within the planning area. Exhibit 1--Checklist of Resource Problems or Conditions in the NPPH or a similar state checklist, is based on categories of resources, considerations, and resource "aspects" which correspond to the column headings found in the "Conservation Practices Physical Effects" (CPPE) matrix located in Section V of the Field Office Technical Guide (FOTG).

Resource inventories and an analysis of resource data are completed in steps three and four. The results of this analysis are compared to quality criteria to document the kind, amount, and extent of existing and potential resource problems.

A broad range of technically feasible conservation alternatives is developed with the client. Alternatives may include structural and management measures as well as measures that mitigate potential adverse impacts on the resources. The purpose of formulating alternatives is to provide the most effective, efficient, and economical conservation treatments that address resource concerns and are acceptable to the client in solving problems, addressing opportunities, and meeting the stated objectives.

The conservation alternatives are developed to a Resource Management System (RMS) level. A RMS is a combination of practices that, when installed, will meet or exceed established quality criteria for identified soil, water, animals, plants and air resource problems for resource sustainability. The installation of the planned practices will provide for the long-term conservation, protection, and/or improvement of the resource base. When one or more of the resource concerns do not meet the minimum requirements for sustainability, planning is considered progressive. Progressive planning is when a client is ready, willing, and able to make some, but not all, of the decisions necessary to achieve an RMS level of management.

Resource Management System Formulation

The Resource Management System formulation process is discussed in detail in the National Planning Procedures Handbook (NPPH).

The preplanning phase can involve the use of information found in the FOTG. These include:

General Resource References for Resource Planning:

Field office resource inventory and other supporting data are located in Section I of the FOTG.

Site and soils information is found in Section II of the FOTG.

• Conservation Practice Physical Effects (CPPE) Document:

The CPPE document is in Section V-A-1 of the FOTG.

• Quality Criteria:

Quality Criteria are in Section III of the FOTG.

Guidance Documents:

Guidance documents are located in Section III of the FOTG. These documents are usually specific for a particular area, generally a county or a group of counties.

Conservation Effects for Decisionmaking:

Section V-B of the FOTG shows effects of applying practices in the RMS examples.

Resource Management System Quality Criteria

INTRODUCTION

Quality criteria establish the minimum treatment level necessary to adequately address the natural resource considerations that are identified during the planning process for the development of a Resource Management System (RMS). Quality criteria are quantitative or qualitative statements that are established in accordance with local, state, and federal programs and regulations in consideration of ecological, economic and social effects.

Not all resource concerns have quality criteria that can be quantified or have assessment tools that can measure changes in the resource. Table 1--Quality Criteria identifies the resource concerns where quality criteria can be quantified and an assessment tool is available to measure changes in the resource. This table lists minimum treatment criteria for natural resource planning at the RMS level.

Resource concerns with established quality criteria are listed in Table 1. Resource concerns identified using Exhibit 1--Checklist of Resource Problems or Conditions in the NPPH or a similar state checklist that are not listed in Table 1 still need to be addressed if they have been identified as a resource concern in step 1 of the planning process. Most states have developed resource concern checklists based on the categories of resources, considerations, and resource "aspects" which correspond to the column headings found in the "Conservation Practices Physical Effects" (CPPE) matrix located in Section V of the Field Office Technical

Guide (FOTG). These checklists should be retained and used as a reference when first doing an on-site resource inventory. The resource checklist can provide planners with a comprehensive list of potential planning considerations.

DEFINITIONS

Quality Criteria—Refers to the level or condition of the resource that is considered to be minimally acceptable. All technical assistance provided to resource users will be directed toward achieving the criteria level established for SWAPA—soil, water, air, plants, animals. Resource quality criteria provide a means of determining the adequacy of technical assistance to land users by evaluating the ability of planned Resource Management Systems (RMS) to achieve certain levels in an acceptable time frame.

Resources and Considerations—

NRCS policy lists five resources (SWAPA) to include in all technical assistance efforts. The policy contains specific considerations related to each of the resources for which criteria were developed. Both the <u>resources</u> and their respective <u>considerations</u> are addressed individually.

<u>Treatment Standards</u>—Refers to the planned and/or applied conservation measures necessary to achieve quality criteria in the resources of concern. Resource quality criteria provide a "goal", while treatment standards provide the "means" by which to reach that goal. Treatment standards are the basis for RMS and serve as the measure of adequacy for planned treatment.

Resource Management System Quality Criteria

ESTABLISHMENT OF QUALITY CRITERIA

In the establishment of criteria, the following basic rules were followed for consistency and uniformity.

- Quality Criteria statements reflect a minimally acceptable CONDITION of the resource. Quality Criteria are quantifiable and have a tool to provide measurement. All resource concerns that may be addressed during the planning process may not have established quality criteria.
- Established criteria represent a MINIMUM level that is acceptable for a resource or resource concern. Because resource concerns, as written in policy, are problem oriented, criteria in effect state the acceptable level of change in a resource.
- Quality Criteria are quantifiable.
 Terms for criteria must state clearly "when enough is enough", so that planners know when planned treatment is adequate.
- Quality Criteria levels must be ATTAINABLE with current technology and approved conservation practices.
- 5. Quality Criteria relate directly to an acceptable PLANNING level.
- 6. Quality Criteria of the resource represents a level that SUSTAINS the use and productivity of the resource indefinitely. There may be some negative short term effects on the resources to obtain the long term positive effects.

 Quality Criteria levels should be USABLE, MEASURABLE, and/or RECOGNIZABLE.

APPLICATION OF QUALITY CRITERIA

Quality Criteria establishes the minimum treatment level necessary to adequately address the resource concerns identified during the planning process for the development of a RMS.

The RMS criteria are met when treatment has been planned that, when applied, will resolve all of the identified resource problems (concerns) according to the Quality Criteria. The RMS will be considered applied when all of the conservation practices that make up the system have been installed, implemented or applied according to Practice Standards and Specifications in Section IV of the FOTG.

In some instances, actions by individual decisionmakers cannot solve the resource concerns because it involves more than one decisionmaker. In these instances, group planning, project measures or multiprogram activities may be required to meet the respective Quality Criteria. In cases where the decisionmaker can not solve the problem as an individual, the criteria will be met when the land under the control of the decisionmaker does not adversely contribute to the problem.

The use and implementation of these criteria will be consistent with federal, state, and local laws and regulations.

Planning Resource Management Systems

PLANNING RESOURCE MANAGEMENT SYSTEMS

A Resource Management System (RMS) is a combination of practices that will solve the identified resource problems to at least the level indicated in the quality criteria and meet the cooperator's objectives. Successful resource management is dependent on the correct application of the practices that make up a RMS for managing the soil, vegetation, and/or harvesting of vegetation. These practices are essential to prevent resource degradation and ensure sustainable use. Other practices are used to enhance the resource management system and/or adequately treat a resource concern.

Table 2--Conservation Planning Guide, contains the framework for development of RMS level conservation plans. This table can be developed on a Major Land Resource Area (MLRA) basis in order to maintain consistency across state and/or agency boundaries. All resource concerns listed in the "Primary Resource Concern" column must be evaluated for each major land use, as a minimum, to achieve RMS level plans. The column labeled "Essential Practices" includes conservation practices that will generally address the listed resource concerns. These practices will be the minimally accepted practices contained in the conservation plan to meet a RMS. The column labeled "Other Practices" lists practices alphabetically that may also be needed to compliment the Essential Practices, depending upon the circumstances.

These "Other Practices" are <u>not required</u>, but may be needed to complement the plan. Any practice in Section IV can be included in the plan.

Table 2 is sorted by common systems, as listed in the National Planning Procedures Handbook (NPPH). Only resource concerns that can be measured are listed as "Primary Resource Concerns." Other resource concerns may be identified during the planning process. A RMS must satisfy the quality criteria for the "Primary Resource" Concerns" and address other resource concerns, as needed, on a case by case basis. Technical judgement will be required to determine treatment levels for resource concerns with no measurable quality criteria. The practices listed in Table 2 are the commonly used practices for that land use, but any practice contained in Section IV of the Field Office Technical Guide (FOTG) may be used to address any resource concern.

All practices contained in Section IV of the FOTG must be applied according to its specifications. Change in the primary resource concerns will be measured by the respective assessment tool. Resource concerns without an assessment tool will be considered adequately treated when the practice(s) used to treat the resource concern has been installed according to the specifications developed for the practice.